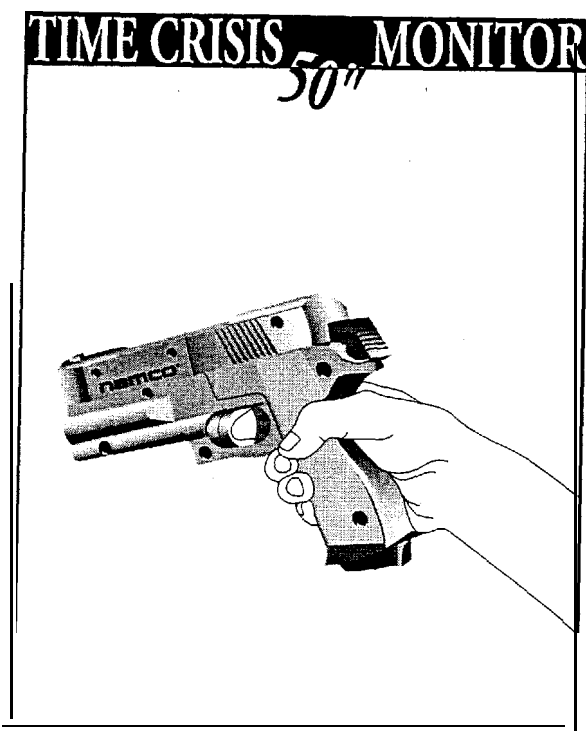


namco® America Inc.



Operator's Manual

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1 .O SPECIFICATIONS

Logic Power Supply:	200 Watt switching type
Gun Power Supply:	24 VDC, 110 Watt
Input Power:	120 VAC, 60 Hz, 7 Amps max.
Overall Height:	95", with marquee installed.
Crated Dimensions:	Monitor Cabinet Assy: 55" W x 41" D x 87" H Player Cabinet: 37.5" W x 48.5" D x 48" H
Shipping Weight:	Monitor Cabinet Assy: 425 lbs Player Cabinet: 175 lbs
Monitor:	Hitachi 50 inch Model 50UX22BA (S/N 101-327) Hitachi 50 inch Model 50UX23KA (SIN 328-735) Mitsubishi 50 inch Model VS-5041/42 (S/N 736-750, 1701-I 850)
Controls:	Foot Operated "Action" Pedal Solenoid - Activated Gun
Convenience Kit: (in coin box)	Operator's Manual (1) Spare Fuse (1)
Accessory Kit (packed separately)	[Reference Installation Section]
Monitor Accessories: (in rear of cabinet)	Operator's Manual (1) Remote Controller (1)

Note: Specifications subject to change without prior notice. Modifications and/or alterations of the Time Crisis™ game with kits or parts not supplied by NAMCO may void the warranty.

WARNING

REMOVAL OF SERIAL NUMBERS **AND/OR** BAR-CODES FROM PRODUCT OR COMPONENTS WILL VOID THE WARRANTY



2.0 INTRODUCTION

TIME CRISIS is a revolutionary new 1-player, 3-D polygon gun game featuring a new dual purpose "Action Pedal". Players play the part of Richard Miller, a special agent assigned to rescue Rachel, the president's daughter who is being held hostage by Sherudo Garo and his hired team of henchmen. Garo threatens to kill Rachel unless he is handed over the throne. It's up to the player to save Rachel and save the government from anarchy!

The game is composed of three areas, each composed of four stages. The time to complete each stage, area and complete game is recorded. A comparative time measurement compares each player's time against the recorded best time. Players can gain valuable time by shooting special hard to shoot enemies. Special targets detonate bombs that eliminate numerous enemies with one shot!

TIME CRISIS features Namco's proven high accuracy gun, six times more accurate than conventional guns. It even has a special "blowback" feature that simulates gun recoil.

Pressing the New Dual Purpose "Action Pedal" Performs Two Functions:

- * Duck or dodge to avoid being shot - While becoming safe from oncoming shots, players cannot shoot from this position. Look through boxes and crates to prepare for unsuspecting enemies!
- * Reloads the gun - Automatically loads six bullets.

Two Game Modes:

- * Story Mode - Start at Stage 1 and end with Rachel's rescue. Players have limited time and lives. Game is over when 3 lives are lost or time runs out. Players may continue.
- * Timed Mode - Players may select any stage. Players have limited time but have unlimited lives. When time is up, game is over. There is no continue feature in this mode.

3.0 PRECAUTIONS

3.1 Installation

This game is designed for indoor use only. It must *not* be installed outdoors. **The following conditions must be avoided:**

1. Direct exposure to sunlight, high humidity, direct water contact, dust, high heat or extreme cold.
2. Vibration. The game must be installed on a level surface with levelers properly adjusted.

Do not install in an area such that the game would present an obstacle in case of an emergency (i.e., near fire equipment or emergency exists).

3.2 Handling

1. Before operating the game, make sure that the main AC power hookup includes a safety ground. This will ensure safe operation as well as compliance with the applicable FCC and UL regulations. Measure the AC power line voltage. Verify that the voltage source is between 110 and 125 VAC.
2. Before replacing any parts, turn the AC power OFF and unplug the game.
3. The game power supply includes areas where 120 VAC is present. Take care at all times to avoid electrical shock whenever inspecting or adjusting the game.
4. Do not attempt to repair the Printed Circuit Board (PCB) on-site. It contains sensitive integrated circuit chips that could be easily damaged, even by the small internal voltage of a multimeter. Always return the PCB to your distributor for any repairs. PCB assemblies must be returned as complete sets.
5. Always return levelers to the extreme up position before moving the game.
6. When moving the game always remove the pedal assembly and pack it separately.

WARNING

Do not attempt to repair the TV monitor. There are areas of high voltage inside. If trouble is suspected in the monitor, refer to the troubleshooting guide in the back of this manual.

4.0 INSTALLATION

Note: Shipping damage may void the warranty. In case of shipping damage, contact your distributor and the transportation carrier immediately.

1. Unpack the marquee and accessories box, and identify the following items:

1 ea	pedal assembly
4 ea	button head screws, M5 x 16. blk, w/flat and lock washers
4 ea	hex head bolts, 3/8-16 x 1-1/4" with washers
4 ea	hex head bolts, 3/8-16 x 2", with washers
3 ea	hex head bolts, 1/4-20 x 2", with flat and lock washers
2 ea	cabinet joint right angle brackets
1 ea	extension harness, for dollar bill acceptor. (AP50-04271-00)

2. Locate the rear component door panel keys attached to the back of the monitor cabinet. Open and remove the component door panel.
 3. Verify that the monitor remote controller and manual are in the back of the monitor cabinet. (These will not be needed for day-to-day operation of the game).
 4. Connect the 12-pin, g-pin, and 4-pin connectors between the 2 cabinets.
 5. With the monitor cabinet and player cabinet approximately level, position them such that the holes in the joint brackets will line up with the cabinet's holes.
 6. Install the brackets using the 3/8-16 bolts with washers. The 2 inch long bolts go into the player cabinet, the 1-1/4 inch bolts into the monitor cabinet. Tighten them to about 20 ft-lb.
 7. Connect the pedal extension harness.
 8. Position the pedal assembly such that the bracket holes align with the threaded holes in the pedal assembly, and install the 4 ea M5 x 16 screws with washers.
 9. Place the marquee on top of the monitor cabinet, making sure that the electrical connector is hooked up. Install and tighten the 3 ea 1/4-20 bolts with washers.
 10. With the game in its installation position, lower the leg levelers,
 11. Plug in the main AC power cord, and turn the game ON. The power switch is located in the lower rear of the monitor cabinet.
-

12. Perform the **set up** and test procedure. Once this has been successfully completed, reinstall the rear access panel.
13. (S/N 101-735 only) For best operation, perform an alignment of the 50 inch monitor. This procedure is outlined in the section entitled "**Notes** on 50 Inch Monitor".

4.1 Set-Up and Test

IMPORTANT: Perform this procedure in the sequence indicated.

1. System initialization is performed as follows:
 - a. Open the COIN door to gain access to the Service Panel
 - b. Remove hands/feet from the controls.
 - c. While pressing the SERVICE button, toggle the TEST switch ON.
 - d. Release the SERVICE button.
 - e. The GUN INITIALIZE Menu screen will appear as shown in Figure 1.
 - f. Use the gun to select the [Standard] Initialization, and step on the pedal to enter.
 - g. With the [Standard] Initialization screen displayed, step on the pedal to bring-up the Gun Calibration screen.
 - h. Aim the gun at the 'X', pull the trigger, and return to the Initialization screen.
 - i. Verify gun response by shooting in the entire area bounded in white. If properly initialized, a green target will appear in each location hit.
 - j. Verify that the gun can be successfully fired several times per second.
 2. Turn the TEST switch OFF, then ON again, and the TEST MENU screen, as in Figure 3, will appear.
 3. From the MAIN MENU, select and adjust the following set-up options to suit the installation requirements:
 - Coin Options
 - Game Options
 - Sound Test (output level adjustment)

Note: NAMCO recommended options are shown on test screens.
 4. Verify proper operation of game controls from the I/O TEST MENU.
-

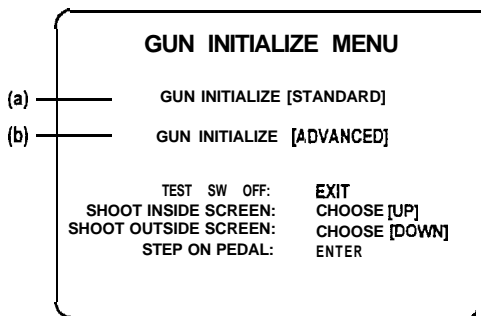


Figure 1: Gun Initialize Menu Screen

- (a) See Initialize [Standard] Screen.

IMPORTANT: USE THE [STANDARD] SCREEN TO ADJUST GUN SIGHT DURING NEW INSTALLATIONS OR AFTER SERVICING GUN.

- (b) Six screens are provided, to check the gun response in various zones in the game screen.

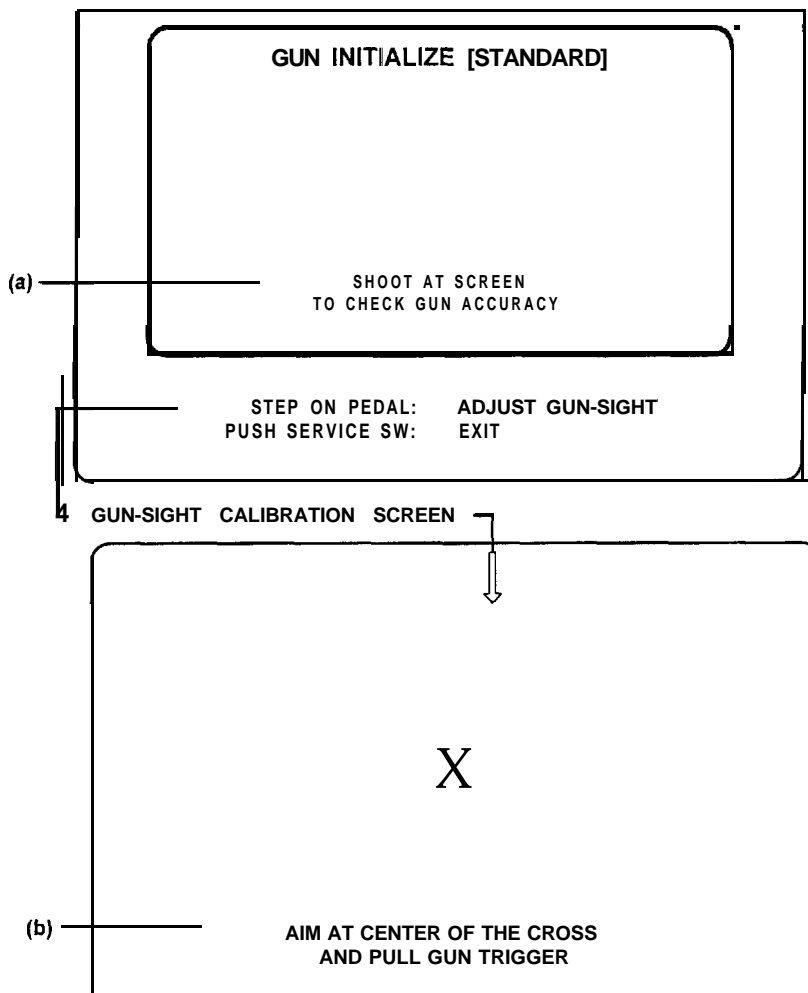


Figure 2: Gun Initialize [Standard] Screen

- (a) If properly initialized, when the gun is fired, the Green Target should register in the entire area outlined in white.
- (b) Return to the initialization screen. Check gun response, in (a) above.

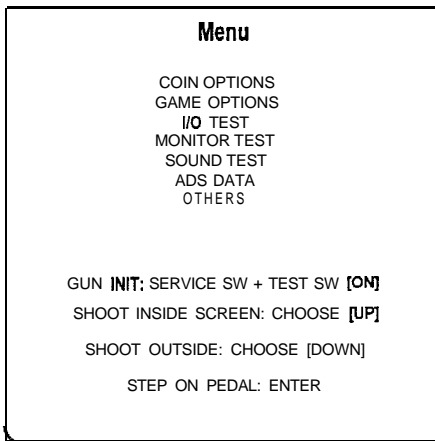


Figure 3: Menu Screen

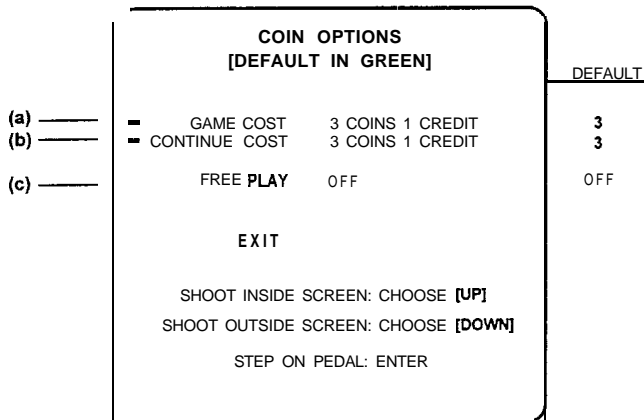


Figure 4: Coin Options Screen

ITEM	AVAILABLE SETTINGS
(a) Game Cost	1-9 Coins
(b) Continue Cost	1-9 Coins
(c) Free Play	OFF/ON

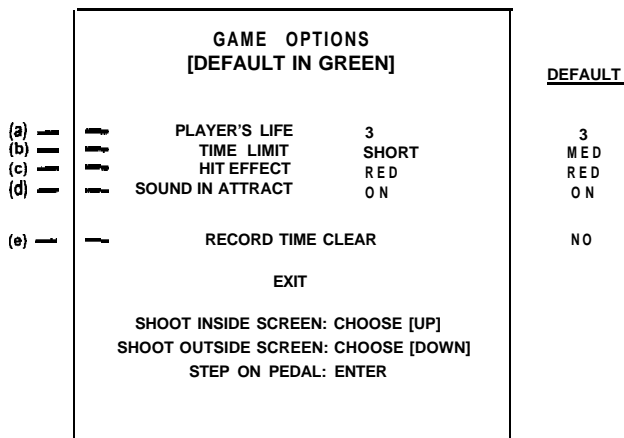


Figure 5: Game Options Screen

ITEM	AVAILABLE SETTINGS
(a) Player's Life	1-9
(b) Time Limit	Very Short, Short, Medium, Long, Very Long
(c) Hit Effect	Red, Green
(d) Sound in Attract	ON, OFF
(e) Record Time Clear	Select YES or NO at the "OK" prompt

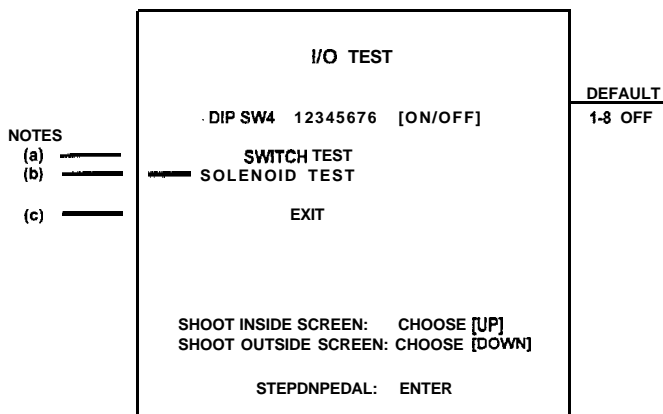


Figure 6: I/O Test Screen

Notes:

- (a) See Switch Test Screen.
- (b) See Solenoid Test Screen.
- (c) Returns You to Main Menu.

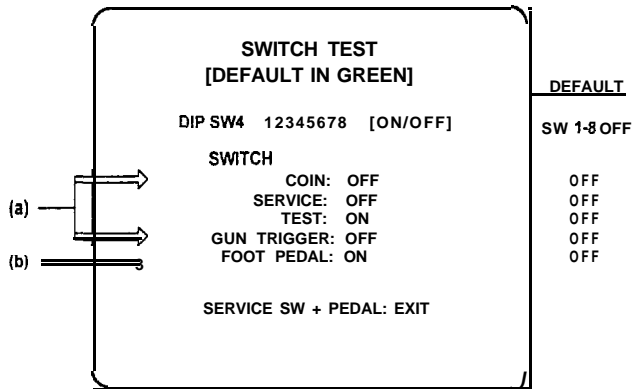


Figure 7: Switch Test Screen

Notes:

- (a) ON or OFF in response to switch activation.
- (b) Foot Pedal Switch registers OFF when the pedal is pressed [when foot is on the pedal].

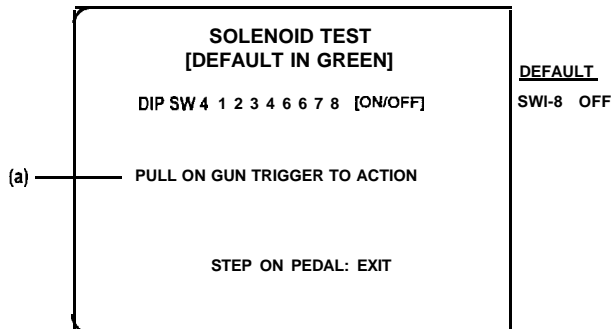


Figure 8: Solenoid Test Screen

Notes-

- (a) Gun Solenoid "FIRES" once, each time the trigger is pressed.

NOTES

- (a) ——— GRADATION PATTERN
(b) ——— CROSSHATCH PATTERN [CRT]
(c) ——— CROSSHATCH PATTERN [PROJECTOR]

(d) ——— → WHITE WINDOW [H]
WHITE WINDOW [M]
WHITE WINDOW [L]

(e) ——— INTERLACE PATTERN
(f) ——— VIEW ANGLE ADJUST [CRT]
(g) ——— VIEWANGLE ADJUST [PROJECTOR]
(h) ——— FULL WHITE

EXIT

SHOOT INSIDE SCREEN: CHOOSE [UP]
SHOOT OUTSIDE SCREEN: CHOOSE [DOWN]
STEPONPEDAL: ENTER

Figure 9: Monitor Test Screen

Monitor Test Descriptions

(a) Gradation Pattern	Four bars (G, R, B, W from top to bottom) with 15 gradations each are displayed.
(b) Crosshatch Pattern [CRT]	Green Grid is displayed. Lines should be reasonably straight, undistorted and uniformly bright across screen. (If not contact Namco. Also, see Troubleshooting notes).
(c) Crosshatch Pattern [Projector]	White Grid is displayed. This can be used to check monitor convergence. Slight non-convergence (R, G or B showing) is normal.
(d) White Window [H, M, L]	Used to check light output (contrast) of screen. WHITE [H] reading should be 40 to 80 ft-L. Monitor contrast adjustments accessible via the Remote Control Monitor Setup Menu.
(e) Interlace Pattern	A pattern of line blocks is displayed, used for indication of vertical hold adjustment. On the center pair of line blocks, the top line of the right block of lines should be aligned with the space between the first and second lines of the left block.
(f) View Angle Adjust [CRT]	Green Screen, with black frame, used at factory to set the VERT height, HORIZ width, and VERT/HORIZ centering. Crosspoint should be in the center of the screen. Horizontal width should be set for slight overscan. If adjustment is required (Ex: New Monitor). Refer to Monitor Adjustment Section.
(g) View Angle Adjust [Projector]	Black Screen, with white frame. Crosspoint should be in center of screen.
(h) Full White	Used to check White Screen light output. (Nominally 15-20 ft-L).

*** Note:** Push Start to Return from Monitor Test Screen to Monitor Test Menu.

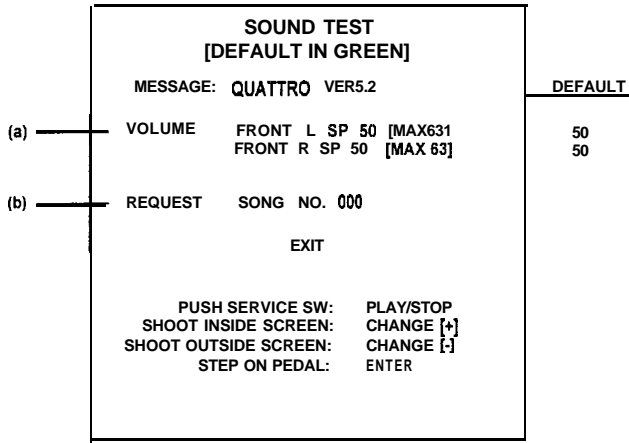


Figure ICl: Sound Test Screen

Item	Available Settings
(a) Volume	1 - 63
(b) Song No.	000 to 298

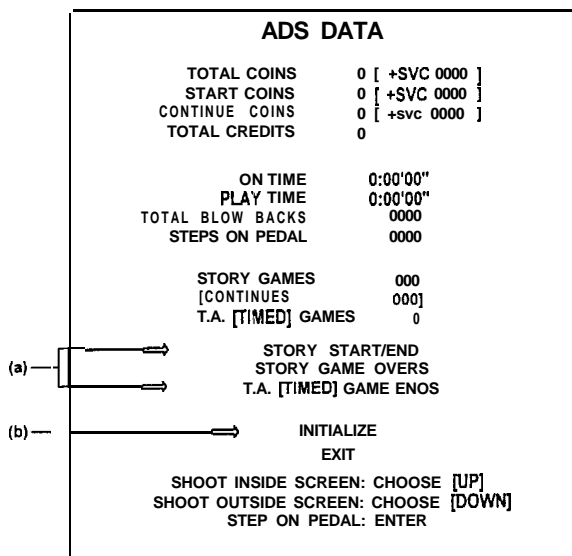


Figure 11: ADS Data Screen

- (a) Additional Data Screens
- (b) Select YES or NO at the ADS Prompt.
 'YES' will reset all game data to 0000.

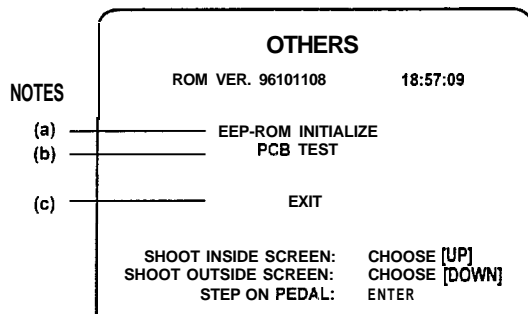


Figure 12: Others Screen

Notes:

- (a) Select 'YES' or 'NO' at the OK? Prompt..
If 'YES' is selected, be sure to recheck gun initialization.
- (b) Video and DSP Tests are provided for factory service personnel.
- (c) To EXIT, push Service Button + Pedal Switch.

5.0 MAINTENANCE

5.1 Monitor Service

The 50 inch monitor does not require regular maintenance, and there are no user-serviceable parts inside.

If a replacement Mitsubishi monitor is supplied for your game, perform the Monitor Adjustment Procedure in APPENDIX A. This will ensure that it is set up for Power-On-Restore and that the screen is properly sized and centered for your Time Crisis, game.

If a monitor malfunction occurs while your game is under warranty, contact your Distributor and/or NAMCO for assistance.

For out-of-warranty repairs, contact your nearest authorized Hitachi or Mitsubishi Service Center.

5.2 Monitor Acrylic Cover, Cleaning

When cleaning becomes necessary, follow these steps:

1. Rinse cover with lukewarm water.
2. Wash gently with mild soap or detergent and lukewarm water, using a **soft** cloth or sponge. DO NOT SCRUB or use brushes or squeegees.
3. Rinse again. Dry with a soft cloth or moist cellulose sponge to prevent water spotting.
4. To remove wet paint, glazing compound, or grease, rub lightly with a good grade of VM&P naphtha or isopropyl alcohol, then wash and rinse. DO NOT USE GASOLINE.

Compatible Cleaning Agents

Aqueous solutions of soaps and detergents

Fantastik ¹	Mr. Clean ²	Formula 409 ¹
Neleco-Placer	PineSol ⁴	Joy ²
Top Job ²	Lysol ³	Windex ⁵

Organic solvents

Aliphatic hydrocarbons	Naphtha (VM&P grade)
Kerosene	Petroleum spirits

Alcohols

Isopropyl alcohol	Methanol
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Graffiti removal

Butyl Cellosolve (For removal of paints, marking pen inks, etc.)

Polishing

Johnson's Paste Wax	Novus Plastic Polish #1 and #2
Mirror Glaze Plastic Polish	

¹ ™ Clorox company	² ™ Procter & Gamble	^{***} Sterling Drugs
^{***} American Cyanamid	⁵ ™ Drakett Products Company	

5.3 Gun Removal and Disassembly

CAUTION

Always perform the Gun Alignment and Initialization procedure (per section 4.1) after replacement of gun components or assemblies..

5.3.1 Opening the Gun

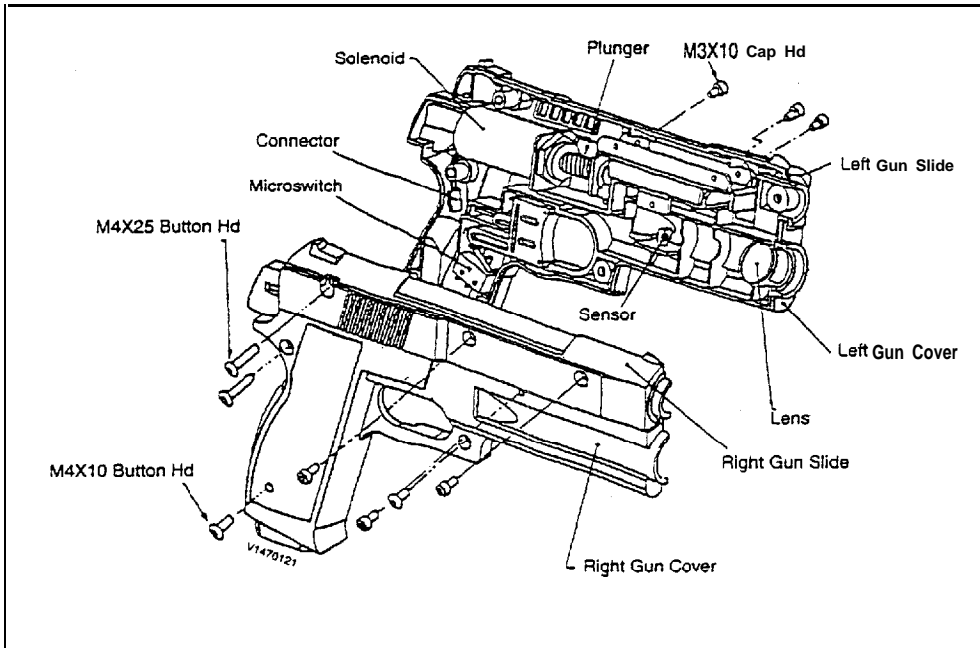


Figure 5-1 Opening the Gun

1. Remove the four M3 x 10 cap screws and one M4 x 25 button head screw that attach the gun side halves.
2. Remove the gun side halves.
3. With the gun assembly laying on its left side, remove the three M4 x 10 button head screws, one M4 x 25 button head screw, and one M3 x 10 cap screw.
4. Lift the right gun cover off the gun assembly. Be careful not to scratch the lens.
[Note: When reassembling the gun, the convex side faces out!]

5.3.2 Replacing the Gun Solenoid

1. Remove the gun covers and gun side halves.

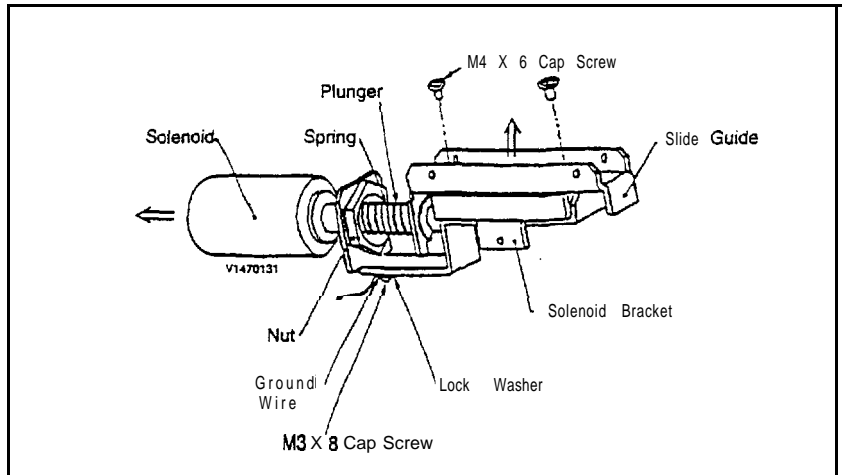


Figure 5-2 Gun Solenoid Assembly

2. Disconnect the solenoid connector.
3. Remove the M3 x 10 cap screw attaching the solenoid/slide assembly to the left gun cover.
4. Remove the M3 x 8 cap screw and washer attaching the ground wire to the solenoid bracket.
5. Loosen the solenoid nut.
6. Pull the solenoid away from the bracket.
7. Remove the two M4 x 6 cap screws attaching the slide guide to the bracket.
8. Remove the solenoid plunger and spring.

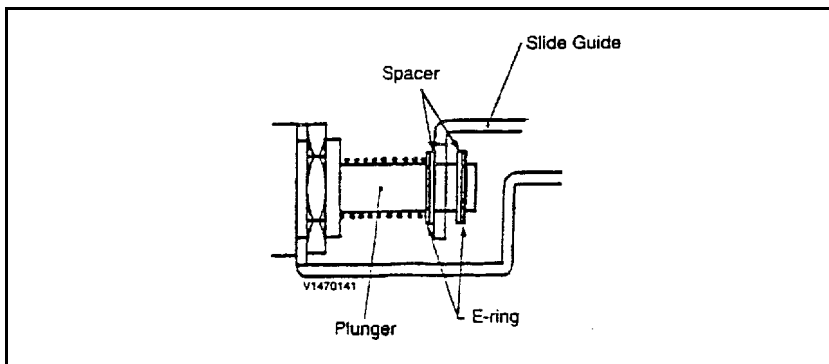


Figure 5-3 Solenoid Plunger Detail

9. When reassembling the solenoid, pay particular attention to the order of E-rings and spacers. Make sure the solenoid harness faces downward upon reassembly.

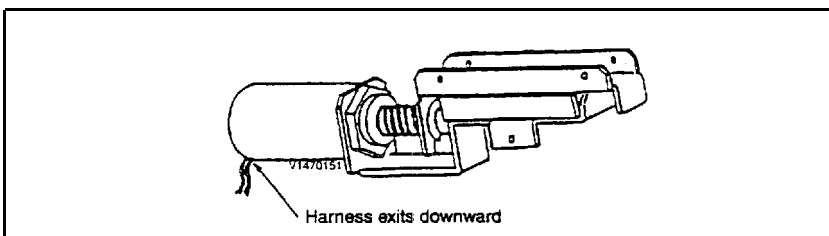


Figure 5-4 Solenoid Reassembly

5.3.3 Trigger Switch Replacement

1. Remove the gun covers and gun side halves.
2. Remove the two screws that attach the microswitch to its bracket.
3. Remove the two connectors that attach the trigger microswitch to the gun harness, and replace the switch.
4. Upon reassembly, check the condition of the trigger spring.

6.0 TROUBLESHOOTING

Problem		Probable Cause		Solution
No video or sound.	1)	No AC power.	1)	Check main AC fuse in rear of cabinet. If fuse is OK, check voltage across input side of EMI filter. Should be 115-120VAC. If no voltage, then ON/OFF switch is bad, replace. If EMI filter input voltage is good, check voltage at the output (load side) of EMI filter. If no voltage, EMI filter is bad, replace. Verify that monitor power cord is plugged in.
	2)	No DC power.	2)	Check AC input plug on switching power supply. Verify PS switch is ON. Check DC output voltage at 9-pin connector. RED to BLK should be 5+/- .15VDC. ORG to BLK should be 12VDC -0/+1.8VDC. If 12VDC is bad, check for output shorts by removing load connectors one at a time (ref. overall wiring diagram in Appendix). If loads are OK, or if 5VDC is out of tolerance, replace power supply. (Note: output is non-adjustable).
No video, but monitor is powered-up.	1)	Video input to monitor is disconnected, or bad video cable.	1)	Verify that S-VIDEO cable is connected between back of monitor and RGB/NTSC PCB (small board on component shelf). Verify that correct input channel is selected on monitor. Should be EXT-I S-VIDEO. Check using remote control INPUT button to toggle through selections.
	2)	Monitor problem.	2)	Verify monitor is OK by selecting ANT Input, using remote control. If OK, snow or raster should appear on screen. If bad, DO NOT ATTEMPT TO REPAIR MONITOR OR THE MANUFACTURER'S WARRANTY WILL BE VOIDED. (Note: If warrant) service is required, contact NAMCO through your Distributor. In the U.S., repair service for your monitor is provided through the manufacturer's nationwide network of authorized TV repair centers. For in-warrant! repairs outside the U.S., contact NAMCC Customer Service for assistance. NAMCC reserves the right to repair or replace defective monitors at its discretion. Advance replacement monitors cannot be provided to location! outside the U.S. and U.S. territories).

Troubleshooting (continued)

Problem		Probable Cause		Solution
No video, but monitor is powered-up (con't)	3)	No DC power.	3)	See above. Verify that P1 is connected on SS22 PCB rack.
	4)	Main PCB problem.	4)	Check cooling fan on PCB rack. Make sure it is operating. Verify that PCB cards are seated properly in rack. Verify that RGB and SYNC signals are present at J9 pins 1,2,3,4 w.r.t. pin 5. NOTE: DO NOT ATTEMPT TO REPAIR PCBs OR WARRANTY WILL BE VOIDED. If main PCB rack is suspected bad, verify by swapping with known good unit. If service is req'd, contact your Distributor.
	5)	VIDEOAMP PCB problem	5)	Verify that J1, 2, and 3 are connected. Verify that 5V and 12VDC is present at J2. Compare input vs. output signals. If no output, replace VIDEOAMP.
	6)	RGB/NTSC PCB problem.	6)	Verify that J3, J4, and S-VIDEO cables are connected. Check for 12VDC at J4. Check for signal on RCA output jack. If no signal, replace PCB.
No audio.	1)	Cables bad, or incorrectly connected.	1)	Check connectors J1-J5 on AUDIO PCB (mounted on top of main PCB rack). Check continuity of cables from J2 to RCA jacks on back of monitor. Jacks should be connected to EXT-1 L/R receptacles.
	2)	Sound output set too low.	2)	Adjust audio volume in TEST Mode (SOUND Test). Ref. Set-Up and Test section. Default value is 50.
	3)	AUDIO PCB problem.	3)	Verify +12VDC on J1 of AUDIO PCB. If the above items check out but still no audio, replace AUDIO PCB.
	4)	Monitor audio circuit or speakers are defective.	4)	Monitor needs service.
Distorted audio.	1)	Volume set too high.	1)	Adjust in SOUND Test mode.
	2)	AUDIO PCB problem.	2)	Replace devices or PCB.
	3)	Main PCB problem.	3)	Main PCB rack requires service.
	4)	Incorrect speaker impedance.	4)	Verify 8 ohm speakers.

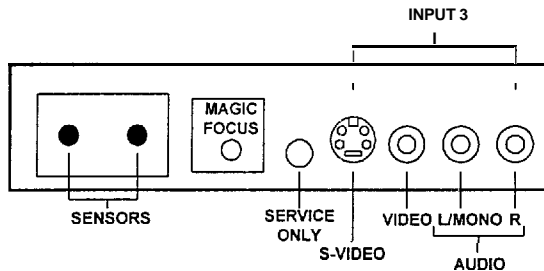
Troubleshooting (continued)

Problem		Probable Cause		Solution
Distorted video.	1)	Video, DSP, CPU, or MROM card problems in main PCB.	1)	Reseat cards. If problem persists, PCB set requires service.
	2)	S-VIDEO cable is defective.	2)	Replace cable.
	3)	RGB/NTSC or VIDEO AMP PCB problem.	3)	Check connections to boards. Swap boards with known good units.
	4)	Interference from audio ckt.	4)	Confirm by reducing audio volume. If interference goes away, check wiring around Video amp and RGB/NTSC boards. Wires should be well routed. If problem persists, try powering Video PCB off isolated +12VDC supply.
	5)	Monitor convergence error.	5)	Re-converge monitor (see service manual for details).
Gun will not shoot targets.	1)	Gun not initialized.	1)	Check initialization section.
	2)	Gun sensor bad.	2)	Inspect sensor, replace if sensor is yellow in the center.
	3)	Gun cable defective.	3)	Repair or replace cable.
	4)	Gun trigger defective.	4)	Check trigger.
	5)	Position PCB trouble.	5)	Check connections, swap with known good PCB.
	6)	Joint PCB.	6)	Check 4-pin connection on Joint PCB.
	7)	Gun or monitor screen dirty.	7)	Clean.
Gun "Blowback" not working.	1)	Trigger or cable defective, as above.	1)	Check components.
	2)	Gun drive PCB not working (in rear of cabinet).	2)	Check power to board and operation of solid state relay.
	3)	Gun solenoid defective.	3)	Repair or replace gun.
	4)	24V power supply trouble.	4)	Check power supply in rear of monitor cabinet. Replace if defective.
	5)	Gun or monitor screen dirty.	5)	Clean. Once corrected, verify operation of "Blowback" in TEST mode, Solenoid test.
Pedal does not work properly	1)	Pedal microswitch defective or is out of adjustment.	1)	Check switch status in TEST mode, I/O SWITCH test. If problem, remove cover of pedal assy and inspect switch and wiring.
	2)	Pedal plunger is loose, bent, or jammed.	2)	Remove cover and inspect. Apply grease to striker plate and tip during reassembly.

NOTES ON 50 INCH MONITOR (HITACHI)1. Alignment

Upon initial installation, or after the game has been moved, the following alignment procedure should be performed.

- a. Remove the cover plate located in the lower center of the monitor cover, providing access to the monitor service panel. Locate the remote control unit.



Hitachi Front Service Panel

- b. On the service panel press the Magic Focus button. The monitor will perform a self-test, where it correlates the RGB convergence to values that are stored in memory. Allow the test to run to completion without interruption.
- c. On the monitor remote control, press the **AVX** button.
Verify that VIDEO: [S-IN] has been selected. (This sources the video signal from the Namco game-board). The source input is displayed in the upper right corner of the screen.
- d. Re-install the cover plate and place the remote controller in a place where it will not get lost. (Recommend attached to the rear of the monitor).
- e. The Hitachi monitor has been configured for automatic power-on-restore. This means that the monitor will automatically power-up whenever the game's main power supply is turned ON. The remote control is not needed for day-to-day operation. When "recycling" the main power, always allow at least 10 sec. of OFF time for the circuit to reset.

2. Service

Repair service is provided through the network of Hitachi Electronics authorized service facilities. If the monitor requires service while the game is under warranty, contact your distributor and Namco Customer Service at (800) 326-4263. Repairs will be performed at the service facility nearest you.

APPENDIX A: MONITOR ADJUSTMENT PROCEDURE
(Mitsubishi VS-5041/42)

ADJUSTMENT PROCEDURES

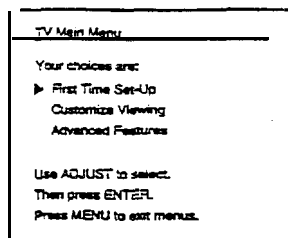
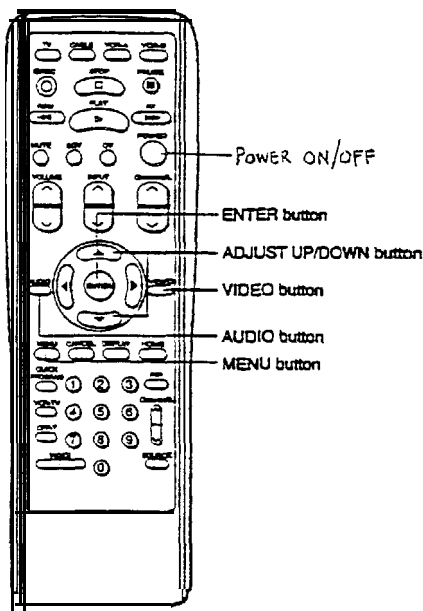
WITH MITSUBISHI MODEL 5041 OR 5042

CAUTION: The TV power plug will fit into the the power outlet only one way. DO NOT force the power plug into the power strip.

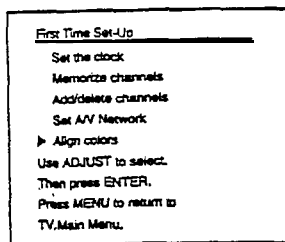
1. **Make** sure the TV is OFF.
2. Plug the Test Fixture S-VI-IS Cable to the DIN adapter of the TV front panel.
3. Using the remote control **turn** the TV ON. Let the TV warm up for a few minutes (3-5 minutes).
4. Press the (↑↓) **INPUT** buttons to change to SYNC • 3 (S-VIDEO) on the TV screen.

5. Color Display Adjustments:

- Press the "Menu" button on the remote control.
The "TV Main Menu" will appear on the screen.

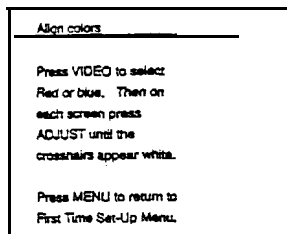


- Select "First Time Set Up" using the ADJUST (↑↓) buttons and press ENTER button.

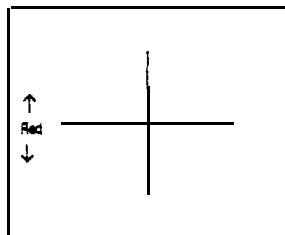
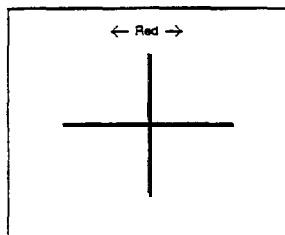


- You will see the "First Time Set-Up" screen. Select the "Align Colors" using the ADJUST (↑↓) buttons; then press the Enter button.

- You will see "Align Colors" screen. Press "VIDEO" for the first time. You will see "WHITE" crosshairs on the screen with ← RED → on top of the crosshairs. At this time you are able to adjust the vertical Red crosshair to line-up with "WHITE" crosshairs; using ADJUST (↑↓) to move the vertical crosshair to the Left or Right.



- Press the "VIDEO" button for the second time to advance to the vertical Blue crosshair; using ADJUST (↑↓) to move the vertical Blue crosshair to Left or Right.
- Press the "VIDEO" button for the third time to advance to the horizontal RED crosshair. Adjust with ADJUST (↑↓) button.
- Press the "VIDEO" button for the fourth time to advance to the horizontal BLUE crosshair. Adjust with ADJUST (↑↓) button.
- Press the VIDEO button the fifth time to go back to the "Align Colors Menu". Press "Menu" button to exit the "TV Main Menu".



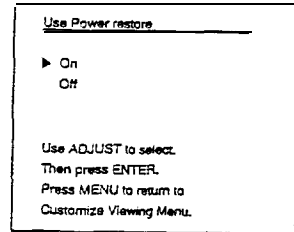
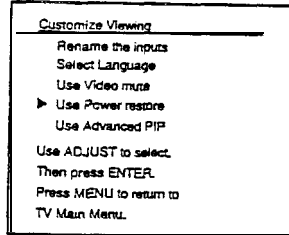
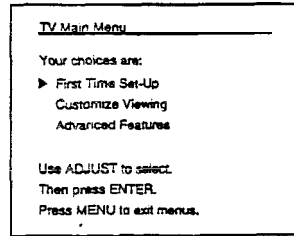
MAKE SURE BOTH RED AND BLUE **ARE ALIGNED AND** FORM A WHITE **CROSSHAIR**.

DO NOT LEAVE THE WHITE CROSSHAIRS FOR A LONG PERIOD OF **TIME**, SINCE **IT** CAN **DAMAGE** THE PICTURE TUBES.

6. Press the MENU button twice to go back to the "TV MAIN MENU".

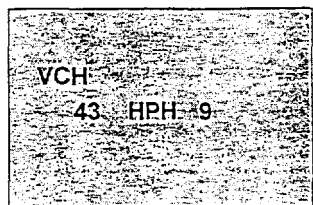
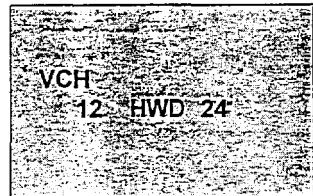
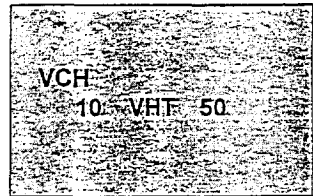
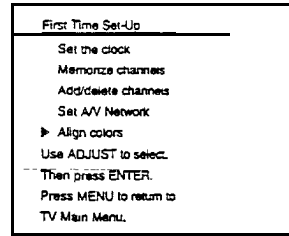
7. Power Restore Adjustment:

- Press the "MENU" button to get into the "TV Main Menu".
- Select "Customize Viewing", use "ADJUST (↑ ↓)" buttons. Press Enter button.
- Select "Use Power Restore" using the ADJUST (↑ ↓) buttons; then press Enter button.
- The "Use Power Restore" screen will appear. Use ADJUST buttons to select "ON" and press Enter and then it will automatically return back to the "Customize Viewing" menu. Press "Menu" button to return to the "TV Main Menu".



8. Circuit Adjustment Mode:

- a. Press the “MENU” button on the remote control (the TV Main Menu will appear).
- b. Press the button “2”, “3”, “5”, “7” in that order. (The screen will change to the circuit adjustment mode). If it is not changed, repeat step a and b again.
- c. After these numbers are entered, a text screen and numbers will appear in the middle of left-handed screen.
- d. Press “VIDEO” button to advance to #10, **Vertical Height (VHT)**.
- e. Press **ADJUST** (↑↓) arrow to change the adjustment value to “50”.
- f. Press “ENTER” button to save the adjustment data in memory. When the “ENTER” button is pressed to save the data, the displays of characters goes red for approx. two seconds and then goes away.
- g. Press “VIDEO” button to advance to # 12, **Horizontal Width (HWD)**.
- h. Press **ADJUST** (↑↓) arrow to change the adjustment value to “24”.
- i. Repeat step f.
- j. Press “VIDEO” button to advance to # 43, **H-Center Position (HPH)**.
- k. Press **ADJUST** (↑↓) arrow to change the adjustment value to “9”.
- l. Repeat step f.
- m. Press “Menu” twice to get back to “VIDEO” mode.



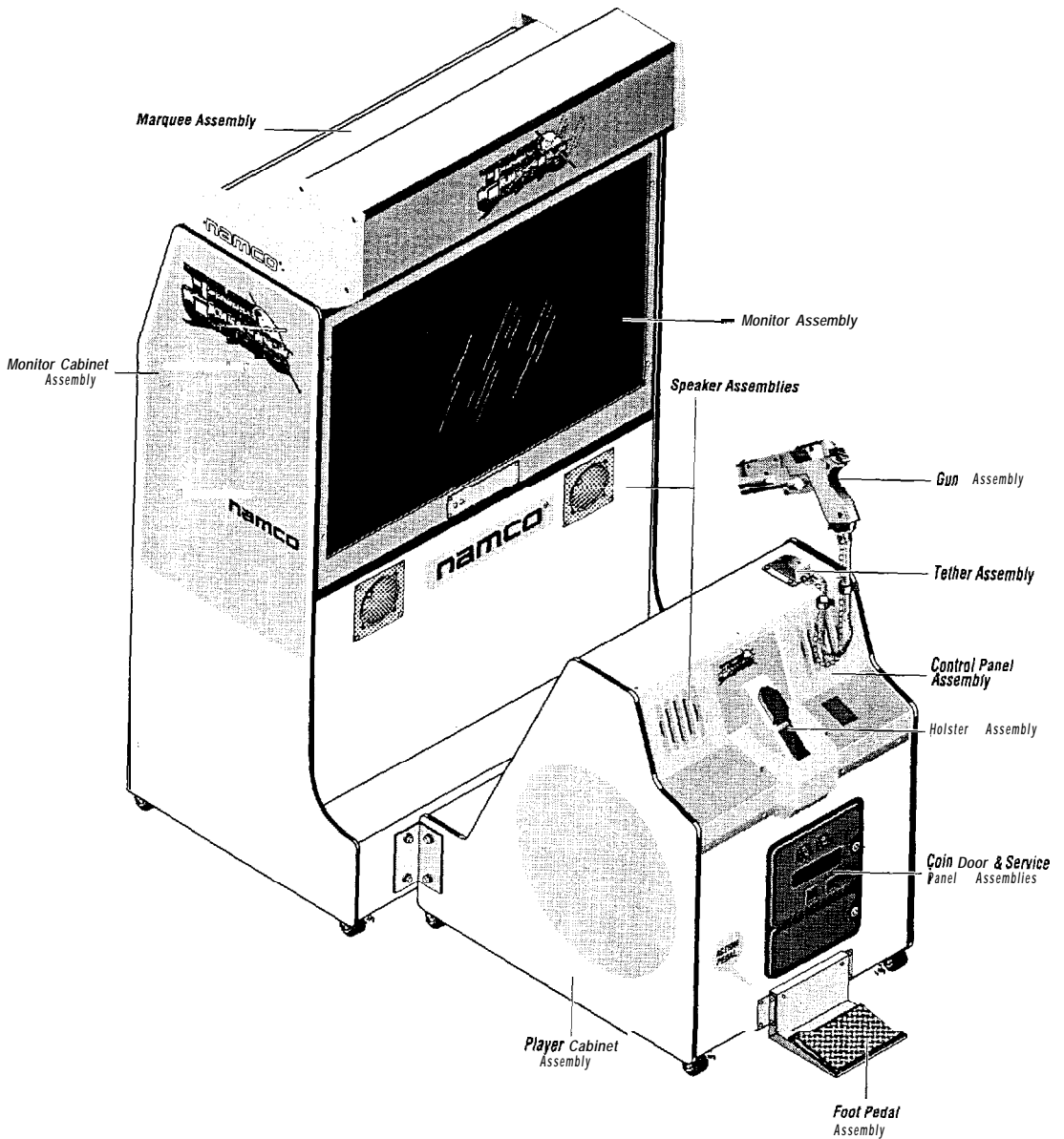
- n. Adjustment is complete, turn power OFF on both the TV and Test Fixture. And remove S-cable

NOTE: These “initial data” are the initial values of that adjustment These initial data may not be correct for the normal performance of each TV monitor. The visual check is necessary.

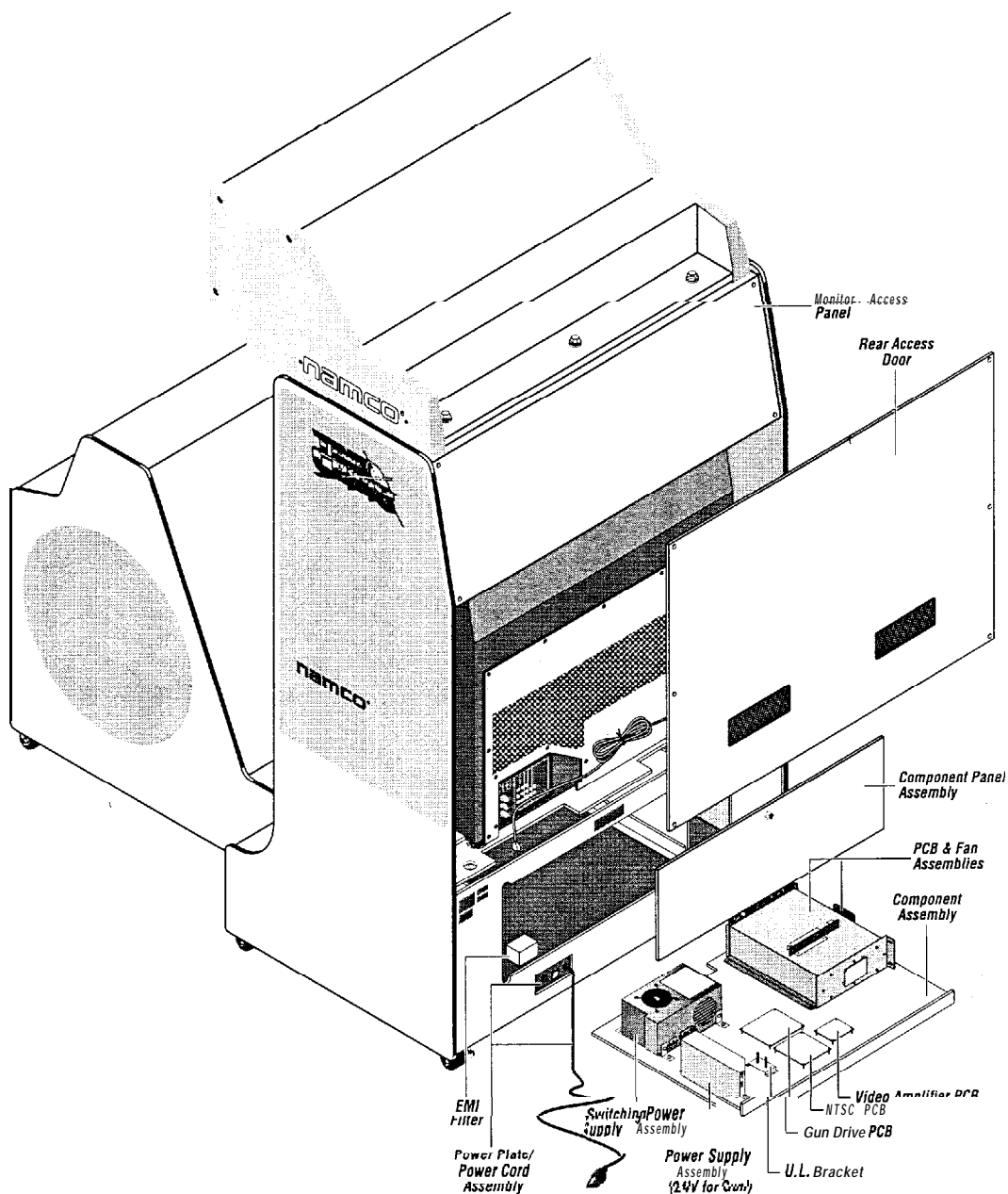
APPENDIX B: PARTS LIST and ILLUSTRATIONS

Title	Page
Major Assemblies (Front View)	B-3
Major Assemblies (Rear View)	B-5
Monitor Cabinet Assembly (Front View)	B-6
Monitor Cabinet Assembly, (Rear View)	B-7
Monitor Cabinet Assembly parts list	B-8
Monitor Cabinet Assembly parts list (con't)	B-9
Control Panel, Blue Gun & Tether Assemblies	B-10
Pedal Assembly w/Harness	B-11
PCB Set Assembly	B-12
List of Harness Assemblies Power Plate (AC) Assembly Service Panel Assembly	B-13
Blue Gun Assembly (detail)	B-14

**TIME CRISIS 50" MONITOR, Major Assemblies
(Front View)**

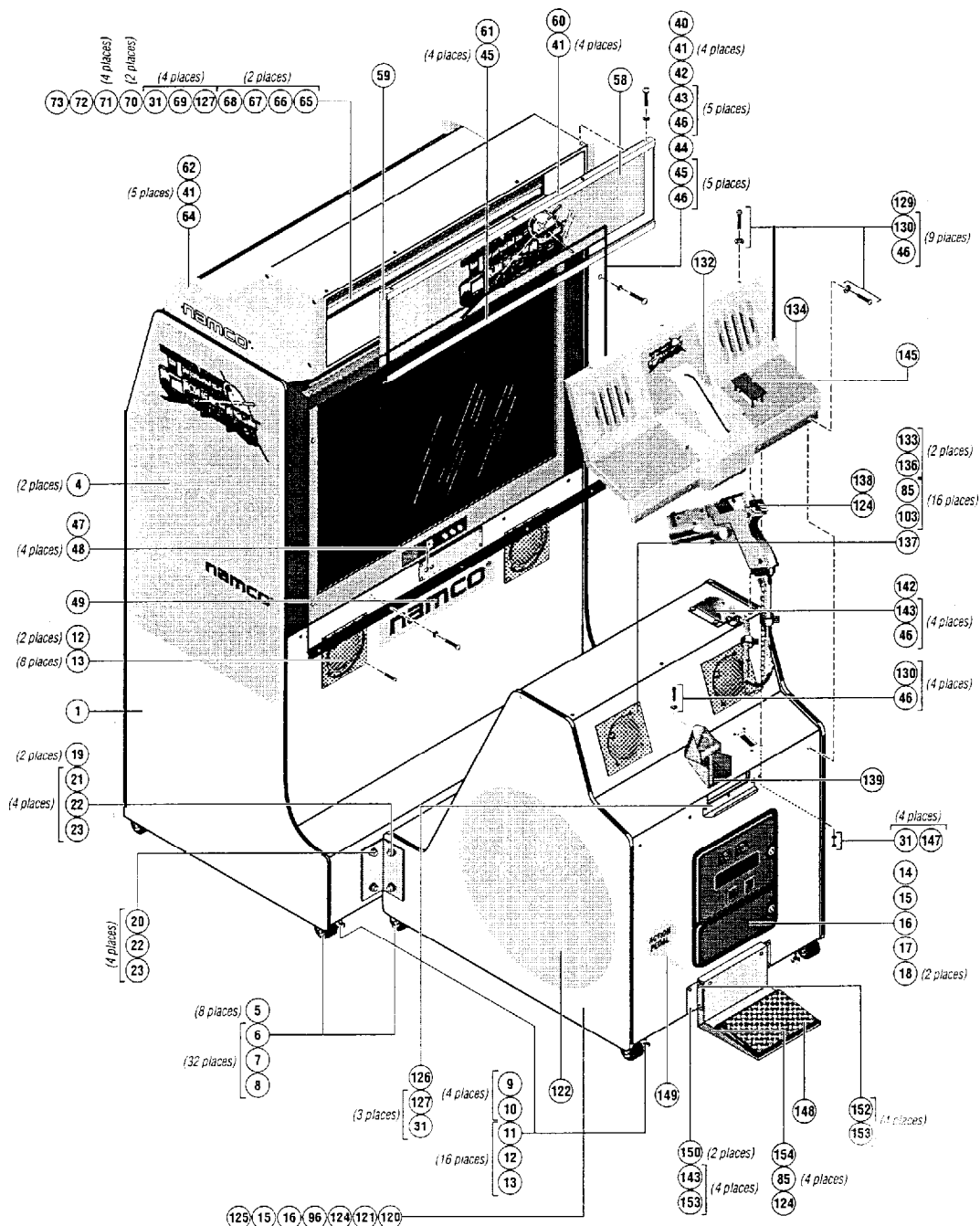


TIME CRISIS 50" MONITOR, Major Assemblies (Rear View)



TIME CRISIS 50" MONITOR, Cabinet Assembly (Front View)

TC01-04709-00

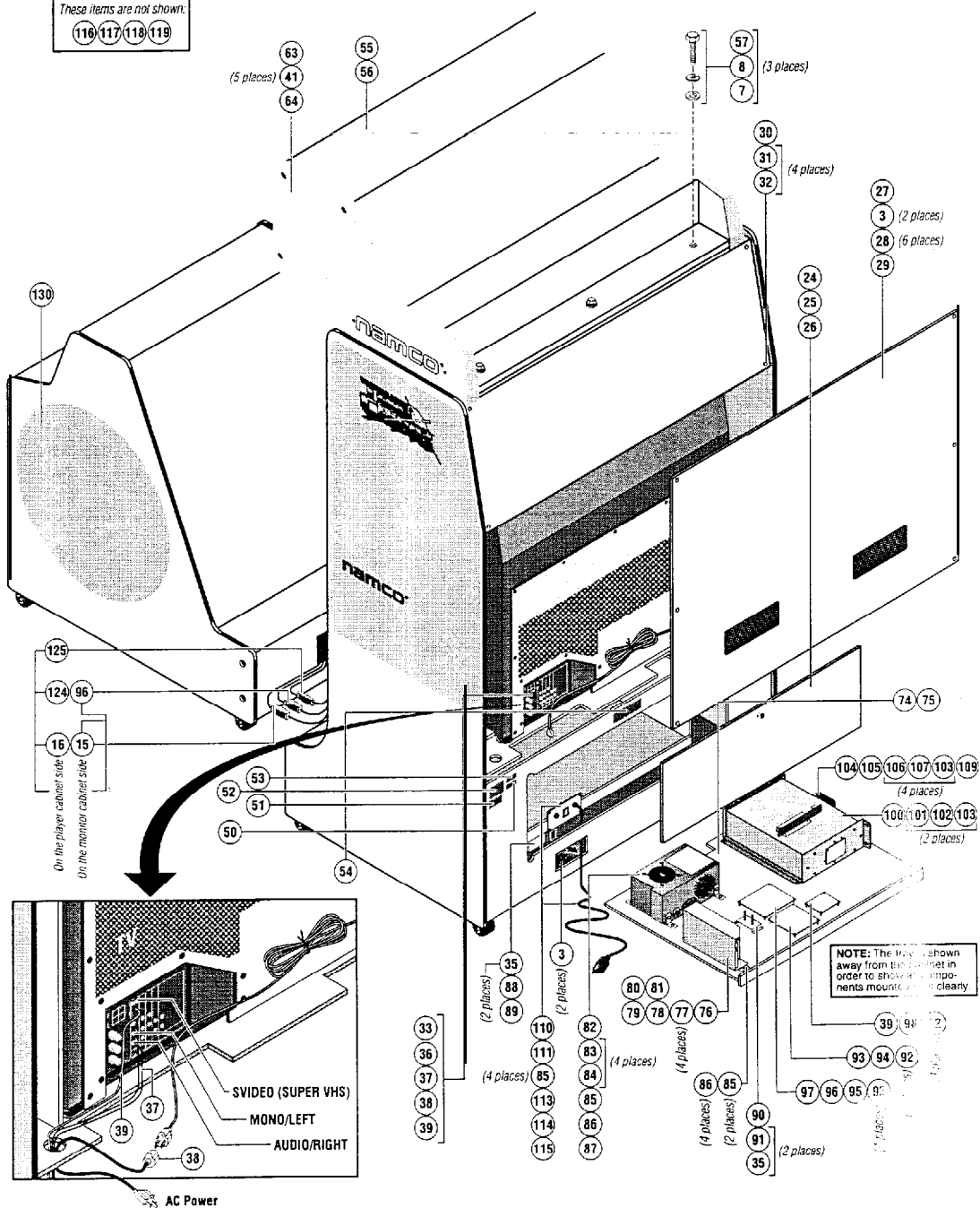


TIME CRISIS 50" MONITOR, Cabinet Assembly, (Rear View)

TC01-04709-00

These items are not shown:

(116) (117) (118) (119)



TIME CRISIS 50" MONITOR, Cabinet Assembly — TC01-04709-00

NO	PART NO	DESCRIPTION	QTY
1	TC05-04786-00	MONITOR CABINET ASSEMBLY	1
3	VG10-04741-00	Grill, Perforated (Bottom of Monitor Cabinet, use staples)	2
4	TC40-04640-00	Decal, Side Panel	2
5	VG24-04933-00	Caster, 3 (4 for monitor & 4 for player cabinets)	8
6	VG20-02860-126	Screw, Hex-Hd., 1/4-20 x 1", Steel, Zinc	32
7	VG20-02862-07	Washer, Split-Lock, 1/4", Steel, Zinc	32
8	VG20-02864-07	Washer, Flat, 1/4", Steel, Zinc	32
9	VG20-03798-00	Leg Leveler, 1/2-13 x 2-1/2 (2 monitor & 2 player units)	4
10	RL10-02683-00	Plate, Leg Leveler, 1/2-13	4
11	VG20-02860-12	Screw, Hex-Hd., 1/4-20 x 1", Steel, Zinc	16
7	VG20-02862-07	Washer, Split-Lock, 1/4", Steel, Zinc	16
8	VG20-02864-07	Washer, Flat, 1/4", Steel, Zinc	16
12	VG10-04890-00	Grill, Speaker, Perforated	2
13	VG20-04114-10	Screw, Pan-Hd, Wood, #8 x 3/8", Black Oxide	2
14	TC83-04926-00	COIN DOOR ASSEMBLY, 2 SLOTS w/HARNES	1
15	TC50-04725-00	Harness Coin Door & Service, 50" Monitor	1
16	TC50-04726-00	Harness, Coin Door & Service Ext., 50" Monitor	1
17	DD05-04768-00	SERVICE PANEL ASSEMBLY	1
18	VG20-02896-06	Screw, Pan-Hd., Phillips, #8-32 x 3/8", Steel, Zinc	2
19	TC10-04796-00	Bracket, Joint, Monitor/Player Cabinet	2
20	VG20-04091-32	Bolt, Hex-Hd., 3/8-16 x 2", Blk. Oxide (player cabinet)	4
21	VG20-04091-20	Bolt, Hex-Hd., 3/8-16 x 1-1/4", Black, Oxide (Monitor cabinet)	4
22	VG20-02865-09	Washer, Flat, 3/8", Blk. Oxide	8
23	VG20-02863-09	Washer, Split-Lock, 3/8", Black, Oxide	8
24	TC05-04895-00	COMPONENT PANEL ASSEMBLY (Bottom)	1
25	TC63-04887-00	Panel, Wood	1
26	VG26-04609-00	Lock, Rear Access Door	1
27	TC05-04957-00	REAR ACCESS DOOR (Middle)	1
28	VG10-04741-00	Grill, Perforated (Back Panel) (use staples)	2
28	VG20-02897-48	Screw, Pan-Hd Phillips, #10-24 x 2", Steel, Zinc	8
29	VG20-02864-05	Washer, Flat, #10, Steel, Zinc	8
30	TC63-04979-00	PANEL MONITOR ACCESS (Top)	1
31	VG20-02897-48	Screw, Pan-Hd. Phillips, #10-24 x 2", Steel, Zinc	4
32	VG20-02864-05	Washer, Flat, #10, Steel, Zinc	4
33	VG85-04816-00	MONITOR, REAR PROJECTION, 50" (HITACHI)	1
33a	VG85-05446-00	Monitor, Rear Projection, 50" (HIT 50U x38A)	1
33b	VG85-03945-00	Monitor, Rear Projection, 50" (MITS VS-5041/42)	1
36	TC50-04720-00	Harness, Speakers 50" Monitor (not shown)	1
37	TC50-04721-00	Harness, to Speakers 50" Monitor, (RCA jack)	1
38	AP50-03425-00	Harness, AC Power	1
39	VG51-04028-02	Cable, Super VHS Video, 1M	1
40	VG95-04752-00	Cover, Monitor Acrylic (HIT 228)	1
40a	TC95-05109-03	Cover, Monitor, Acrylic (HIT 228, MITS VS-5041/42)	1
41	VG20-02900-10	Screw, Pan-Hd Phillips, #8 x 5/8", Black Oxide	4
42	TC10-04747-00	Retainer, Upper	1
43	VG20-02901-12	Screw, Pan-Hd Phillips, #10-24 x 1 1/4", Black Oxide	8
44	TC10-04748-00	Retainer, Lower (HIT 228, MITS 5041/42)	1
44a	TC10-05107-00	Retainer, Lft. (HIT 23K)	1
44b	TC10-05107-01	Retainer, Right (HIT 23K)	1
45	VG20-02901-16	Screw Pan-Hd 10-24 x 1", Black, Oxide	8

NO	PART NO	DESCRIPTION	QTY
46	VG20-02865-05	Washer, Flat, #10, Black, Oxide	11
47	TC10-04909-00	Plate, Access, Magic Focus Button (HIT 2281)	1
47a	TC10-05108-00	Plate, Access, Magic Focus Button (HIT 23 K)	1
48	VG20-02888-04	Screw Bin-Hd., Tmp-Prf, #8-32 x 1/4", Blk. Ox (HIT only)	4
49	TC40-04648-00	Decal, Front Panel, Monitor (NAMCO)	1
50	TC46-04844-00	Label, U.L. Time Crisis, 50" Monitor	1
51	VG46-02653-00	Label, FCC	1
52	VG46-02654-00	Label, FBI WARNING	1
53	VG46-02655-00	Label, Serial Number	1
54	VG44-03968-00	Label, CAUTION, "Service Personnel ONLY"	1
55	TC05-04785-00	MARQUEE ASSEMBLY	1
56	TC63-04792-00	Cabinet, Marquee	1
57	VG20-02860-32	Bolt, Hex 1/4-20 x 2", Steel, Zinc	3
8	VG20-02864-07	Washer, Flat, 1/4", Steel, Zinc	3
7	VG20-02862-07	Washer, Split-Lock, 1/4", Steel, Zinc	3
58	TC95-04855-00	Acrylic, Marquee Cover, 50" Monitor	1
59	TC40-04650-01	Styrene, Time Crisis Marquee	1
60	VG10-04745-00	Retainer, Marquee, Too	1
41	VG20-02906-10	Screw, Pan-Hd, Wood, #8 x 5/8", Black, Oxide	4
61	VG10-04746-00	Retainer, Marquee, Lower	1
45	VG20-02907-16	Screw, Pan-Hd, 10-24 x 1", Black, Oxide	4
62	VG90-04959-00	Plastic, Marquee, Left Side (Red)	1
63	VG90-04959-01	Plastic, Marquee, Right Side (Red)	1
41	VG20-02906-10	Screw, Pan-Hd, Wood, #8x5/8", Black, Oxide	10
64	TC40-04824-00	Decal, Marquee Side (NAMCO) Red/Black	1
65	VG57-03871-00	Lamp Fluorescent, 36"	2
66	VG57-03870-00	Fixture, Fluorescent, 36"	2
67	VG44-03850-00	Label, Lamp Replacement	2
68	VG44-02644-14	Label, Lamp Value, 115V, 30W	1
127	VG20-02897-16	Screw, Pan-Hd., #10-24 x 1", Steel, Zinc	4
69	VG20-04772-05	Nut, Polymer, #10-24, Steel, Zinc	4
31	VG20-02864-05	Washer, Flat, #10, Steel, Zinc	4
70	VG95-02117-00	Grommet, 7/8", Dia. Hole	2
71	GT57-02219-00	Lock Fluorescent	4
72	TC50-04914-00	Harness, Fluorescent	1
73	TC50-04913-00	Harness, Fluorescent Extension	1
74	TC05-04787-00	COMPONENT ASSEMBLY	1
75	TC63-04841-00	Shelf, Component Board	1
76	VG88-04690-00	Power Supply, 24v (for gun)	1
77	VG20-03180-08	Screw, Pan-Hd., #8 x 8, Steel, Zinc	4
78	VG10-04614-00	Bracket, 24V, Power Supply	2
79	VG20-02903-10	Screw, Pan-Hd, Wood, #8 x 5/8", Steel, Zinc	4
80	TC50-04735-00	Harness, AC Input (24V), 50" Monitor	1
81	TC50-04732-00	Harness, 24V Power, 50" Monitor	1
a2	VG81-01 615-00	Power Supply, Switching, 200W	1
83	VG10-04612-00	Bracket, Mounting Power Supply	4
a4	VG20-02903-10	Screw Pan-Hd., Wood, #8 x 5/8", Steel, Zinc	4
a5	CY50-03975-00	Harness, Power Cord, Left Power Supply	1
a6	TC50-04724-00	Harness DC Power, 50" Monitor	1
87	TC50-04727-00	Harness, from DC Pow to RGB/NTSC PCB, 50" Monitor	1

TIME CRISIS 50" MONITOR, Cabinet Assembly (Continued)

TC01-04709-00

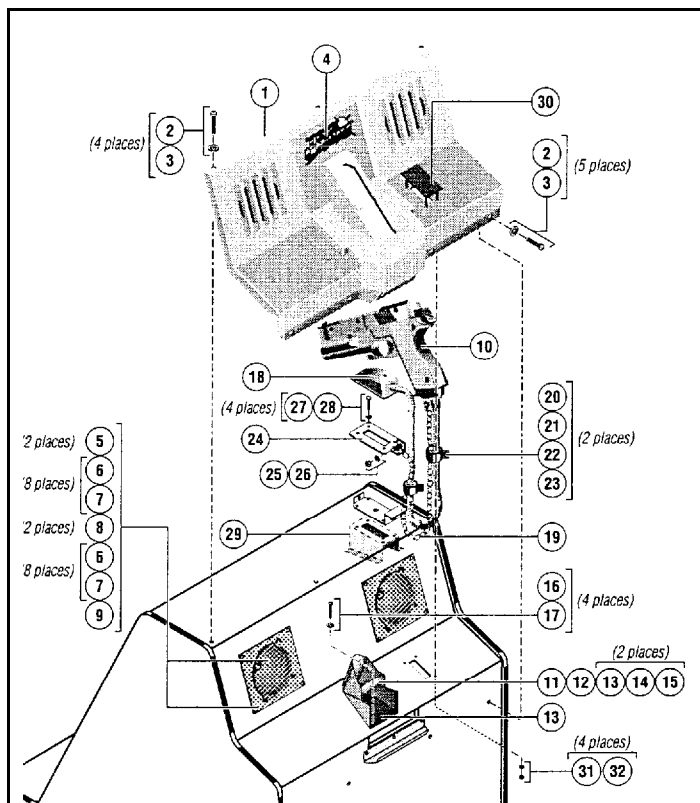
NO	PART NO	DESCRIPTION	QTY
88	VG78-00476-00	Filter, EMI, .25 Tabs	1
35	VG20-02903-12	Screw, Pan-Hd., Wood, #8 x 3/4", Steel, Zinc	2
89	TC50-04733-00	Harness, EMI Out, 50" Monitor	1
90	VG10-03811-00	Bracket, Ground Lug, U. L.	1
91	VG20-02700-05	Nut, Kap, #10-24, Steel, Zinc	2
35	VG20-02903-12	Screw, Pan-Hd., Wood, #8 x 3/4", Steel, Zinc	2
92	VG20-03579-00	Standoff, PCB	12
93	VG84-01792-00	PCS, NTSC	1
94	TC50-04727-00	Harness, RGB to NTSC PCB, 50" Monitor	1
95	TC03-04886-00	PCS, Gun Drive	1
96	TC50-04729-00	Harness, Gun Drive to Gun & Pedal, 50" Monitor	1
97	TC50-04728-00	Harness, CPU to Gun Drive PCB, 50" Monitor	1
98	VG15-04947-00	RS, Video Amplifier	1
100	TC05-04788-00	PC BOARD SET ASSEMBLY, TIME CRISIS	1
101	VG20-02896-36	Screw, Pan-Hd., Philips, #8-32 x 1 1/4", Steel, Zinc	2
102	VG20-02862-04	Washer Split-Lock, #8, Steel, Zinc	2
103	VG20-02864-04	Washer, Flat, #8, Steel, Zinc	2
104	VG55-00060-00	Fan, Axial, 115V AC	1
105	GT55-02248-00	Grill, Fan	1
106	VG20-04712-00	Nut, Ntl, #8-32 x 1/2", Steel, Zinc	4
107	VG20-02896-40	Screw Pan-Hd., #8-32 x 2-1/2", Steel, Zinc	4
103	VG20-02864-04	Washer, Flat, #8, Steel, Zinc	4
109	RV50-04359-00	Harness, to Fan	1
110	DD05-04764-00	POWERPLATE ASSEMBLY	1
111	VG10-04581-00	Plate, Power AC	1
85	VG20-02903-10	Screw, Pan-Hd., #8 x 5/8", Steel, Zinc	4
113	VG20-02700-05	Nut, Hex, #10-24, Steel, Zinc	1
114	VG51-01232-06	Power Cord, 3 Cond., #18 Awg, SJT, 6 Ft w/Molded Plug (for replacement use only)	1
115	CY50-03998-00	Harness, Power Cord, Right Power Supply	1
116	RV50-04359-00	Ferrite Bead (not shown)	4
117	VG78-00198-00	Ferrite Bead (not shown)	2
118	VG78-00199-00	Housing Ferrite (not shown)	4
119	TC50-04734-00	Harness, Main, 50" Monitor	1
120	TC05-04791-00	PLAYER CABINET ASSEMBLY	1
121	TC63-04794-00	Cabinet, Player	1
122	TC40-04649-00	Decal, Side Panel, Pedestal Left	1
123	TC40-04649-01	Decal, Side Panel, Pedestal Right	1

NO	PART NO	DESCRIPTION	QTY
124	TC50-04730-00	Harness Gun & Pedal Extension, 50" Monitor	1
96	TC50-04729-00	Harness Gun Drive to Gun & Pedal, 50" Monitor	1
116	TC50-04726-00	Harness, Coin Door & Service Ext, 50" Monitor	1
111	TC50-04725-00	Harness, Coin Door & Service, 50" Monitor	1
125	TC50-04722-00	Harness, Front Speaker Extension, 50" Monitor	1
126	TC10-04744-00	Bracket, Lower, Control Panel	1
127	VG20-02897-16	Screw Pan-Hd., 10-24 x 1", Steel, Zinc	3
31	VG20-02864-05	Washer, Flat, #10, Steel, Zinc	3
129	TC90-04738-01	Control Panel w/Speaker Holes (plastic)	1
130	VG20-02889-16	Screw, Btn-Hd., Tmp-Prf, #10-24 x 1", Black, Oxide	9
44	VG20-02865-05	Washer, Flat, #10, Black, Oxide	9
132	TC40-04639-00	Decal, Panel, Instruction	1
133	CY54-03866-00	Speaker, 4 Ohm, 20W, 4" Sq.	2
85	VG20-02903-10	Screw, Pan-Hd., Wood, #8 x 5/8", Steel, Zinc	16
103	VG20-02864-04	Washer, Flat, #8, Steel, Zinc	16
136	TC10-04797-00	Grill, Speaker	2
137	AP50-03385-00	Harness, Speaker	1
138	PB03-03141-01	BLUE GUN ASSEMBLY	1
124	TC50-04730-00	Harness, Gun & Pedal Extension	1
139	PB90-03080-01	Holster, Gun	1
130	VG20-02889-16	Screw, Btn-Hd., Tmp-Prf, #10-24 x 1", Blk, Ox	4
46	VG20-02865-05	Washer, Flat, #10, Black, Oxide	4
142	TC05-04715-00	TETHER ASSEMBLY	1
143	VG20-02889-20	Screw, Btn-Hd., Tmp-Prf, #10-24 x 1-1/4", Blk, Ox	4
46	VG20-02865-05	Washer, Flat, #10, Black, Oxide	4
145	VG20-02903-10	Plate, Cover, Ctl mnt, w/studs (covers Ctl mnt hole)	1
31	VG20-02864-05	Washer, Flat, #10, Steel, Zinc	4
147	VG20-02701-05	Nut, Hex, #10-24, Steel, Zinc	4
148	TC80-04671-00	FOOT PEDAL W/HARNES ASSEMBLY	1
149	TC40-04666-00	Decal, Pedal Instruction	1
150	TC10-04716-00	Bracket, Foot Pedal	2
143	VG20-02889-20	Screw, Btn-Hd., Tmp-Prf, #10-24 x 1-1/4", Blk, Ox	4
152	VG20-04930-16	Screw, Skt-Hd., Philips, Tmp-Prf, M5 x 16, Blk, Ox	4
153	VG20-02863-05	Washer, Split-Lock, #10, Black, Oxide	3
154	TC10-04813-00	Bracket, Foot Pedal Support	1
85	VG20-02903-10	Screw, Particle-Board, #8 x 5/8", Steel, Zinc	4
124	TC50-04730-00	Harness Gun & Pedal Extension, 50" Monitor	1

NOTE: Item 122 is listed under Reference Document, and is not part of Power Plate Assembly

TIME CRISIS 50" MONITOR, Control Panel, Blue Gun & Tether Assemblies

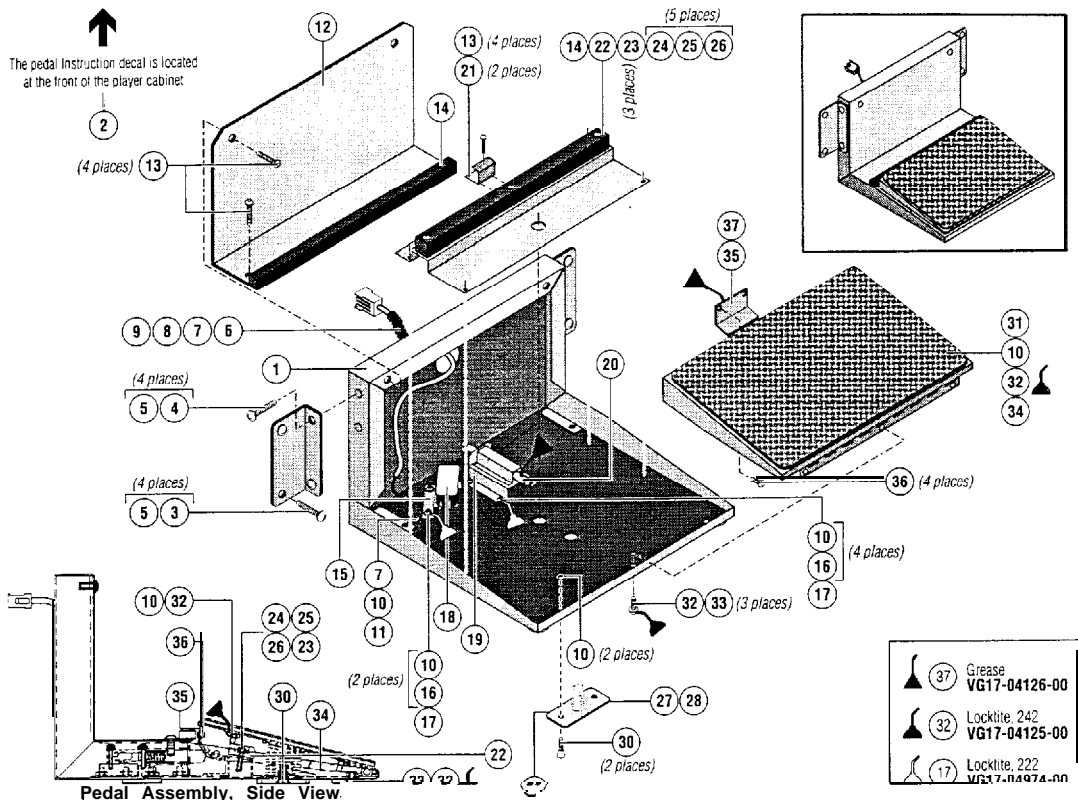
TC90-04738-01, PB03-03141-01 & TC05-04715-00



NO	HAPP NO	NAMCO NO	DESCRIPTION	QTY
1	TC90-04738-01		Control Panel w/Speaker Holes (plastic)	1
2	VG20-02889-16		Screw, Btn-Hd., Tmp-Prf, #10-24 x 1", Black, Oxide	9
3	VG20-02865-05		Washer, Flat, #10, Black, Oxide	9
4	TC40-04639-00		Decal, Panel, Instruction	1
5	CY54-03866-00		Speaker, 4 Ohm, 20W, 4" Sq.	2
6	VG20-02903-10		Screw, Pan-Hd. Wood, #8 x 5/8", Steel, Zinc	16
7	VG20-02864-04		Washer, Flat, #8, Steel, Zinc	16
8	TC10-04797-00		Grill, Speaker	2
9	AP50-03385-00		Harness, Speaker	1
10	PB03-03141-01		BLUEGUNASSEMBLY	1
11	PB90-03080-01		Holster, Gun	1
12	TC96-04893-00		Bumper, Holster	1
13	TC11-04894-00		Spacer, Bumper	1
14	VG20-03339-06		Screw, Btn-Hd, Imp-Rd, #10-32 x 3/8", Blk, Ox	2
15	VG20-02865-05		Washer, Flat, 100, Black, Oxide	2
16	VG20-02863-05		Washer, Split-Lock, #10, Black, Oxide	2

NO	HAPP NO	NAMCO NO	DESCRIPTION	QTY
17	VG20-02865-05		Washer, Flat, #10, Black, Oxide	4
18	TC05-04715-00		TETHER ASSEMBLY	1
19	PB20-03154-00		Chain, 38 Links, #4, .12 Dia. Wire	1
20	PB10-03153-00		Clip	2
21	VG20-02889-06		Screw, Btn-Hd., Tmp-Prf, #8-32 x 3/8", STL, Zinc	2
22	VG20-02864-04		Washer, Flat, #8	2
23	VG20-03322-04		Nut, Nylock, #8-32	2
24	TC10-04693-00		Plate, Mounting, Gun Tether (w/stud for chain)	1
25	VG20-02864-04		Washer, Flat, #8, Steel, Zinc	1
26	VG20-02701-04		Nut, Hex, #8-32, Steel, Zinc	2
27	VG20-02889-20		Screw, Btn-Hd., Tmp-Prf, #10-24 x 1-14, Blk, Ox	4
28	VG20-02865-05		Washer, Flat, #10, Black, Oxide	4
29	TC10-04692-00		Bracket, Tether (w/o mounting H/W)	1
30	VG20-02903-10		Plate, Cover, Ctl Pnl, w/studs (covers Ctl Pnl hole)	1
31	VG20-02864-05		Washer, Flat, #10, Steel, Zinc	4
32	VG20-02701-05		Nut, Hex, #10-24, Steel, Zinc	4

TIME CRISIS 50" MONITOR, Pedal Assembly w/Harness — TC80-04671-00



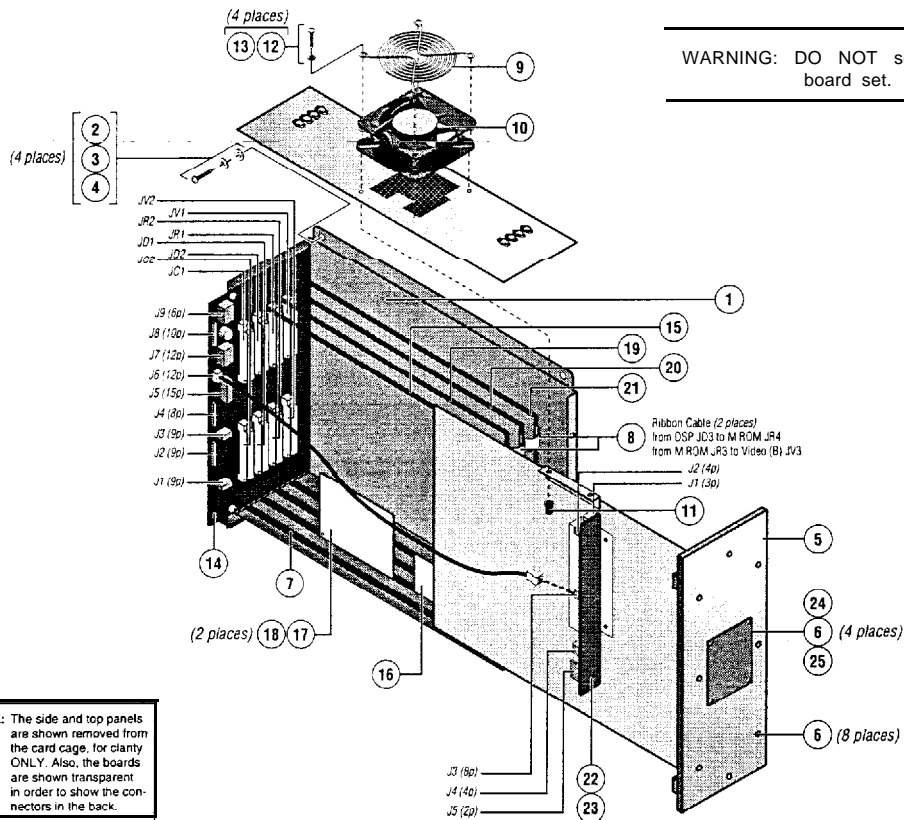
Pedal Assembly, Side View.

	NAMCO NO	DESCRIPTION	QTY
1	96-0145-00	TC10-04716-00 Bracket, Foal Pedal	1
2		TC40-04666-00 Decal, Pedal Instruction	1
3	VG20-02889-20	Screw Bin-Hd., Tmp-Prt, #10-24 x 1-1/4 Blk Ox	4
4	VG20-04930-16	Screw, Socket-Hd., Tmp-Prt, Philips M5x16, Blk Ox	4
5	VG20-02883-05	Washer, Split-Lock, #10, Blk, Oxide	8
6	TC50-04730-00	Harness, Gun & Pedal Extension, 50" Monitor	1
7	96-0149-00	TC50-04729-00 Harness, Gun Drive to Gun & Pedal, 50" Monitor	1
8	43-0127-00	GT26-02439-00 Tie Holder	1
9	43-0103-00	GT10-02231-00 Wire Tie	1
10	43-0175-00	VG20-04969-00 Nut, Kep, M4, Steel, Zinc	1
11	43-0324-00	VG20-04970-00 Washer, Lock, External Tooth, 4, Sll, Zinc	1
12	96-0134-00	TC10-04813-00 Front Cover	1
13	43-0426-00	VG20-04971-12 Screw, Pan-Hd, Torx, Tmp-Prt, M5 x 12, Chrome Pl	4
14	96-0153-00	TC80-04671-01 Rubber, Bumper	1
15	96-0140-00	TC80-04671-02 Bracket, Switch Mounting	1
16	43-0175-00	VG20-04969-00 Nut, Kep, M4, Steel, Zinc	2
17	43-0066-00	VG20-04959-04 Washer, Flat, M4	2
18	96-0148-00	TC80-04672-03 Actuator and Switch Assembly	1
19	96-0135-00	TC80-04672-04 Plunger Housing	1
20	43-0175-00	VG20-04969-00 Nut, Kep, M4, Steel, Zinc	4
21	43-0066-00	VG20-04969-04 Washer, Flat, M4	4

	NO HAPP NO	NAMCO NO	DESCRIPTION	QTY
20	96-0136-00	TC80-04671-05	Switch, Plunger	1
21	96-0150-00	TC80-04671-07	Plunger, Rubber Stop,	2
22	96-0138-00	TC80-04671-06	Bumper Pad	1
23	96-0143-00	TC80-04671-08	Spacer, Bumper Pad	3
24	43-0197-00	VG20-04971-12	Screw, Pan-Hd, Philips, M3 x 16, Sll, Zinc	5
25	43-0428-00	GT20-02257-00	Washer, Flat, M3, Steel, Zinc	5
26	43-0429-00	GT20-02258-00	Washer, Split-Lock, M3, Steel, Zinc	5
27	96-0141-00	TC80-04671-08	Spring, Compression	1
28	96-0147-00	TC80-04671-09	Spring, Compression Plunger	1
29	96-0139-00	TC80-04671-10	Plate, Spring Mounting	1
30	43-0424-00	VG20-04972-14	Screw, Pan-Hd, Philips, M5 x 14, Sll, Zn	2
31	96-0175-00	VG20-04969-00	Nut, Kep, M4, Steel, Zinc	2
32	96-0142-00	TC80-04691-13	Floor, Plate Assembly	1
33	43-0175-00	VG20-04969-00	Nut, Kep, M4, Steel, Zinc	1
34	43-0425-00	VG20-04973-06	Screw, Truss-Hd., Philips, M5 x 6, Blk Ox	3
35	96-0144-00	X80-04671-14	Pivot Assembly	1
36	96-0137-00	TC80-04671-11	Plate, Switch Actuator	1
37	43-0427-00	TC80-04671-12	Rivet, M3	4

TIME CRISIS 50" MONITOR, PCB Set Assembly

TC05-04788-00



WARNING: DO NOT separate board set.

ITEM	PART NO.	DESCRIPTION	QTY
1	CY06-03909-00	Card cage	1
2	VG20-02896-36	Screw Pan-Hd., Philips #8-32 x 2-1/4", Stl. Zn 4	
3	VG20-02862-04	Washer, Split-Lock #8, Steel, Zinc	4
4	VG20-02864-04	Washer, Flat #8, Steel, Zinc	4
5	CY06-03910-00	Card Cage Cover	1
6	VG20-04267-01	4mm Dia x 6 mm Lg. TRS-Hd Philips Screw	12
7	VG06-03595-00	Card Cage Slide	1
8	CY50-04117-00	Ribbon Cable for adjacent PCBs	2
9	GT55-02248-00	Fan Grill	1
10	VG55-00060-00	Fan, Axial, 115V AC	
11	VG20-04712-00	Nut Well, 8-32x112	4
12	VG20-02896-40	Screw Pan-Hd., Philips #a-32 x 2-1/2 Stl Zn 4	
13	VG20-02864-04	Washer Flat #8, Steel, Zinc	4

ITEM	PART NO.	DESCRIPTION	QTY
14	A203-04571-00	Mother PCB Assembly (8646960602)	
15	TC03-04845-00	CPU (B) PCB Assembly (8646962600)	
16	TC03-04847-00	MPM (F) PCB Assembly (24479656)	
17	TC03-04849-00	V159 Gun Point PCB Assembly (2447960102)	
18	VG20-03071-04	Standoff, PCB Miniature Nylon	
19	000364821-00	DSP PCB Assembly (8646960302)	
20	TC03-04846-00	M ROM PCB Assembly (24479654)	
21	TC03-04848-00	Video (BPCB Assembly (8646961200)	
22	TC03-04851-00	Audio Amp 2 Channel PCB Assy (8647961102)	
23	TC50-04723-00	Harness Audio, 50" Monitor	
24	TC03-04850-00	Joint PCB Assembly (2447967210)	
25	TC50-04952-00	Harness Gun Position to Joint PCBs	

TIME CRISIS 50" MONITOR, List of Harness Assemblies

NO	PART NO	DESCRIPTION	QTY
1	CY50-03975-00	Harness, Power Cord, Left Power Supply	1
2	CY50-03998-00	Harness, Power Cord, Right Pwr Supply	1
3	S251-01340-00	Power Cord, 3 Cond., #8 Awg, S.J.T., 6 Ft., w/Molded Plug	1
4	TC50-04720-00	Harness, Speaker, 50" Monitor	1
5	TC50-04915-00	Harness, Speaker	1
6	TC50-04722-00	Harness, Front Speaker Ext., 50" Monitor	1
7	AP50-03425-00	Harness, TV Power	1
8	VG51-04028-00	Cable, Super VHS	1
9	TC50-04721-00	Harness, to TV Speakers, 50" Monitor	1
10	TC50-04729-00	Harness, Gun Drive to Gun & Pedal, 50" Monitor	1
11	TC50-04730-00	Harness, Gun & Pedal Extension, 50" Monitor	1
12	TC50-04731-00	Harness, Pedal, 50" Monitor	1
13	TC50-04914-00	Harness, Fluorescent	1
14	TC50-04913-00	Harness, Fluorescent Extension	1
15	TC50-04723-00	Harness, Audio, 50" Monitor	1

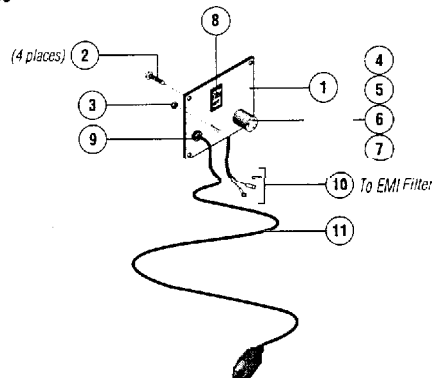
NO	PART NO	DESCRIPTION	QTY
16	TC50-04724-00	Harness, DC Power 50" Monitor	1
17	TC50-04735-00	Harness, AC Input (24V), 50" Monitor	1
18	TC50-04732-00	Harness, 24V Power, 50" Monitor	1
19	TC50-04725-00	Harness, Coin Door & Service Panel, 50" Monitor	1
20	TC50-04726-00	Harness, Coin Door Extension & Service Panel, 50" Monitor	1
21	CY50-03717-00	Harness, Service Panel	1
22	TC50-04727-00	Harness, RGB to NIX PCB, 50" Monitor	1
23	TC50-04728-00	Harness, GU to Gun Drive PCB, 50" Monitor	1
24	TC50-04733-00	Harness, EMI Out, 50" Monitor	1
25	TC50-04734-00	Harness, Main, 50" Monitor	1
26	TC50-04916-00	Harness, RGB, Main PCB to Video Amp	1
27	RV50-0435900	Harness, To Fan	1
28	AP60-04271-00	Harness, 10 Amp. Split	1
29	TC50-04951-00	Harness, DC Adapter to Video Amp PCB, 50" Monitor	1
30	TC50-04952-00	Harness, Gun Position to Joint PCB	1

TIME CRISIS 50" MONITOR, Power Plate (AC) Assembly

DD05-04764-00

NO	PART NO	DESCRIPTION	QTY
1	VG10-04681-00	Plate, Power AC	1
2	VG20-02903-10	Screw, Pan-Hd., Philips, #8 x 5/8", Steel, Zn	4
3	VG20-02700-05	Keypnut, Hex, 10-24 Steel, Zinc	1
4	VG52-03584-10	Fuse, 7 Amp., 250V, Slow Blow	1
5	VG52-03365-00	Rise Holder, Panel Mount	1
6	VG44-02644-18	Label, Fuse Value, 7 Amp, 250V, Slow Blow	1
7	VG44-03865-00	Label, Fuse Replacement	1
8	VG53-04683-00	Switch, Rocker, DPST (ON/OFF)	1
9	VG95-02122-02	Strain Relief, Power Cord (Heyco, 7K-2)	1
10	CY50-03998-00	Harness, Power Cord, Rt Power Supply	1
11	VG51-01232-06	Power Cord, 3 Cond., #18 Awg, S.J.T., 6 Ft., w/Molded Plug (for replacement use only)	1

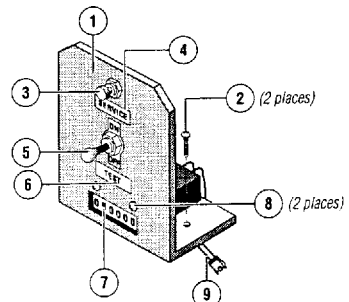
NOTE: Item 11 is **not part of** Power Plate Assembly.



TIME CRISIS 50" MONITOR, Service Panel Assembly

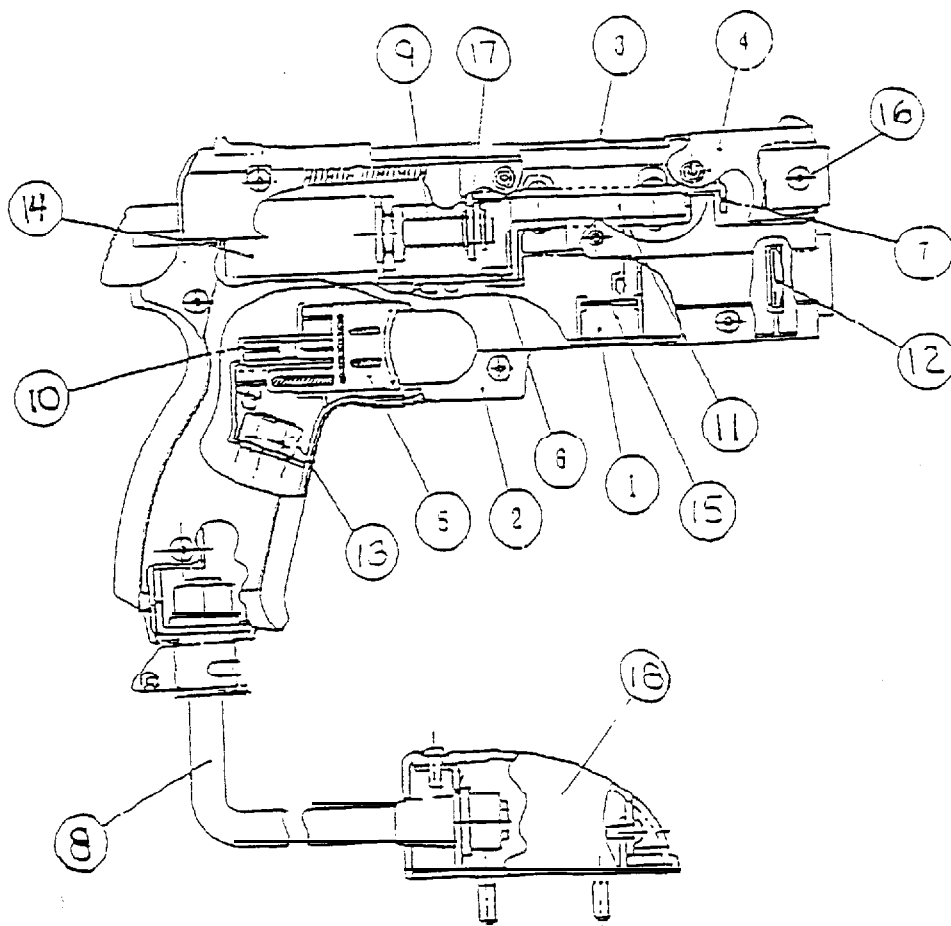
DD05-04768-00

NO	PART NO	DESCRIPTION	QTY
1	VG10-04684-00	Bracket, Service Panel	1
2	VG20-02896-06	Screw, Pan-Hd., Philips, Pcd-Bd., #8 x 3/8", Stl, Zn	2
3	GT53-02052-00	Switch, Mini, Push (Service)	1
4	VG44-02702-01	Label, "SERVICE"	1
5	GT53-00756-00	Toggle Switch, SPST (Test)	1
6	VG44-02702-02	Label, "TEST"	1
7	VG83-02094-00	Coin Meter	1
8	VG20-02894-06	Screw, Pan-Hd., Philips, 4-40 x 3/8" Stl, Zn	2
9	CY50-03717-00	Harness, Service Panel	1



TIME CRISIS, 50" MONITOR, Blue Gun Assembly

PB03-03141-01



NO	PART NUMBER	DESCRIPTION	NO.	PART NUMBER	DESCRIPTION
1.	PB09-03432-00	GUN COVER, LEFT, BLUE	10.	PB09-296-421	TRIGGER SPRING
2.	PB09-03433-00	GUN COVER, RIGHT, BLUE	11.	PB10-04835-00	RAIL SLIDE
3.	PB09-03428-00	GUN SLIDE, LEFT, BLUE	12.	PB09-296-426	LENS
4.	PB09-03429-00	GUN SLIDE, RIGHT, BLUE	13.	PB09-004-056	MICROSWITCH
5.	PB90-04836-01	TRIGGER, BLUE	14.	PB09-004-056	SOLENOID
6.	PB10-04669-00	BRACKET, SOLENOID	15.	PB09-296-467	SENSOR
7.	PB10-04670-00	SLIDE GUIDE, SOLENOID	16.	PB21-04904-00	GUN HARDWARE
8.	PB09-296-401	GUN CORD HARNESS ASSY	17.	PB95-04942-00	SPACER
9.	PB09-296-420	BACK SPRING	18.	PB90-05447-00	CONNECTOR COVER

APPENDIX C: WIRING DIAGRAM

